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ABSTRACT

An apparatus for sealing a passage through tissue includes an elongate shaft and a cylindrical plug disposed on a distal end of the shaft, the plug including a helical thread on its outer surface. Intestinal submucosa may be secured to the plug, e.g., in a cavity in its distal end, that may be delivered into the passage. Alternatively, the plug may be formed from a bioabsorbable material and may be released from the shaft within the passage. The plug is threaded into the passage, thereby engaging the tissue to seal the passage. The shaft is rotated until it engages a blood vessel within the tissue while monitoring blood flow through the vessel. The shaft is rotated to thread the plug into the passage until blood flow ceases through the vessel, whereupon rotation of the shaft is reversed to back the plug until blood flow through the vessel resumes.